

Fig 1 10

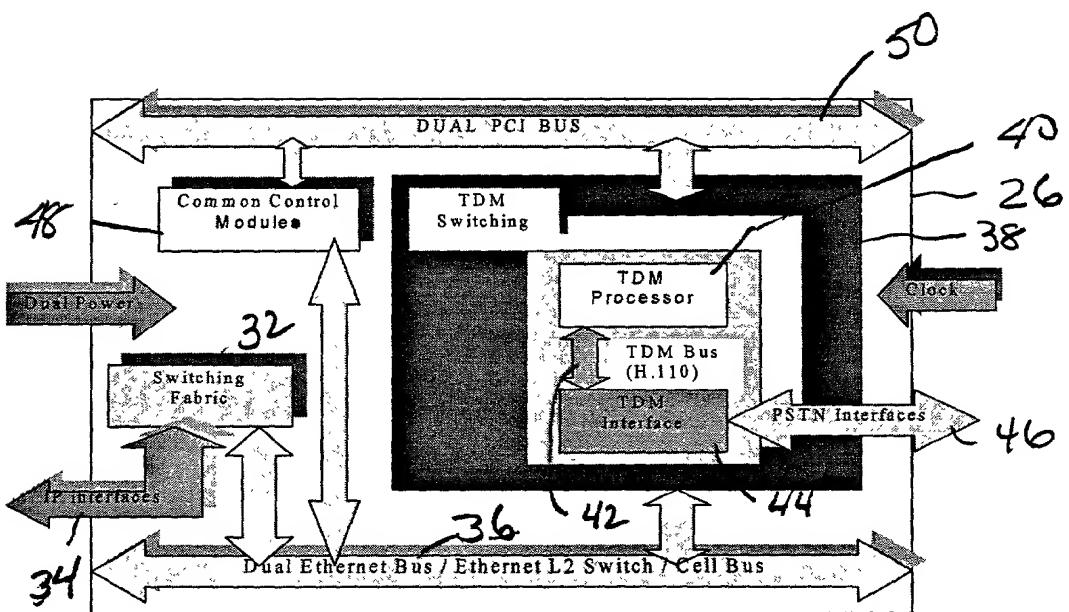


Fig 2

2.1 OUTGOING (BTI-ORIGINATED) CALL SETUP

The signaling flow for setup of an outgoing (i.e., BTI-originated) call is shown in Figure 1.

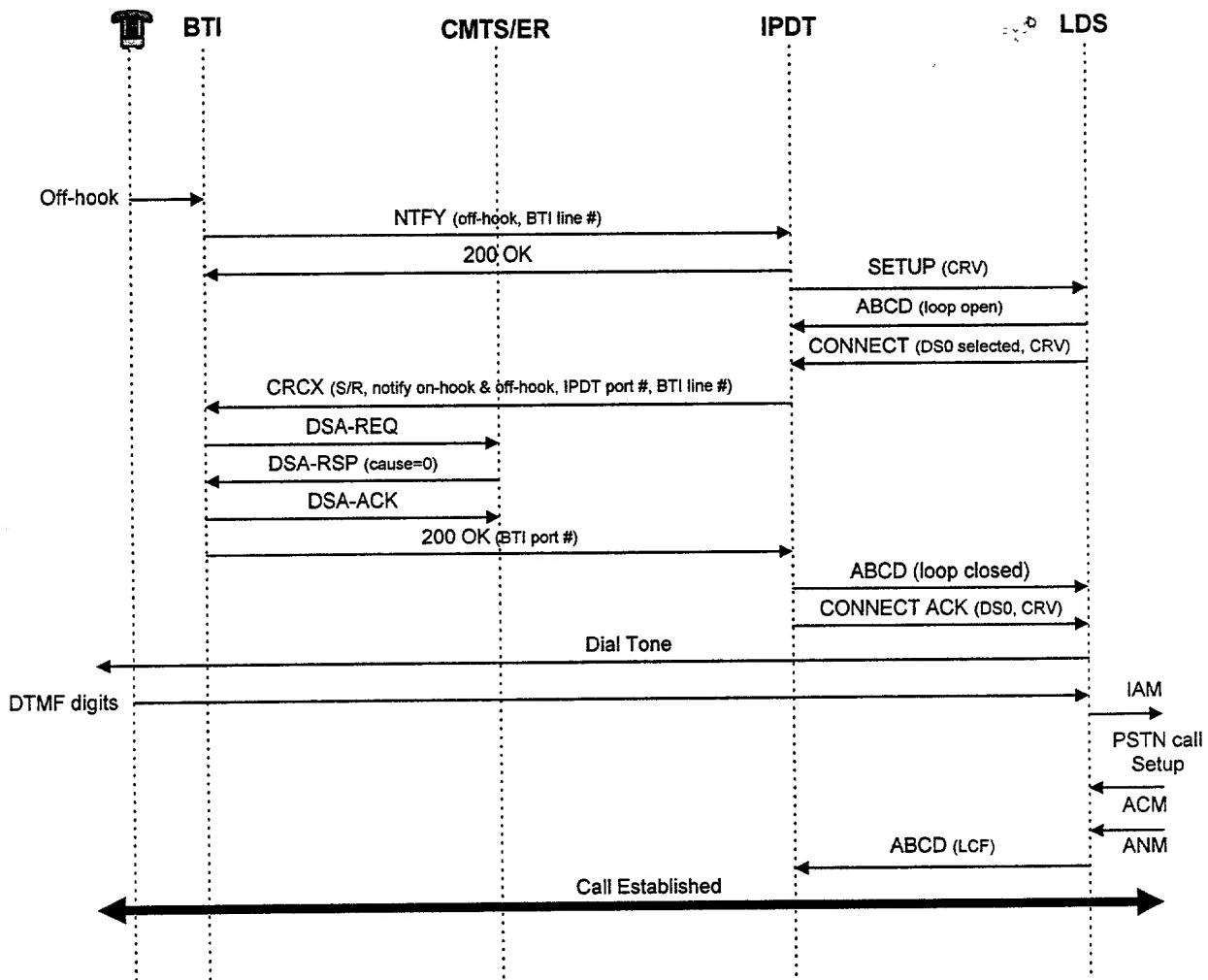


Figure 1: Outgoing (BTI-Originated) Call Setup

Note that a cause code of '0' in a DOCSIS response (DSA-RSP) message is an indication of success.

Fig. 3

2.2 INCOMING (PSTN-ORIGINATED) CALL SETUP

The signaling flow for setup of an incoming (i.e., PSTN-originated) call is shown Figure 2.

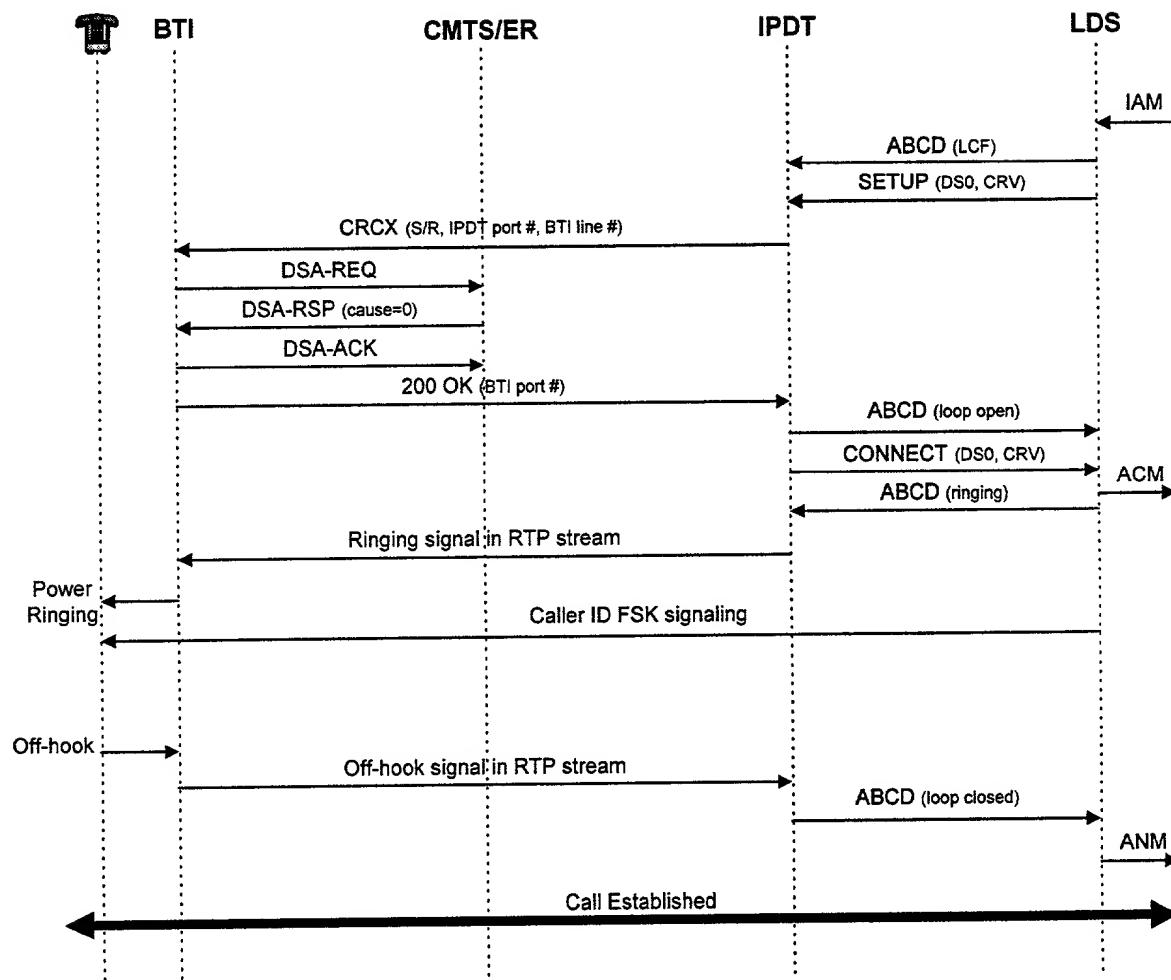
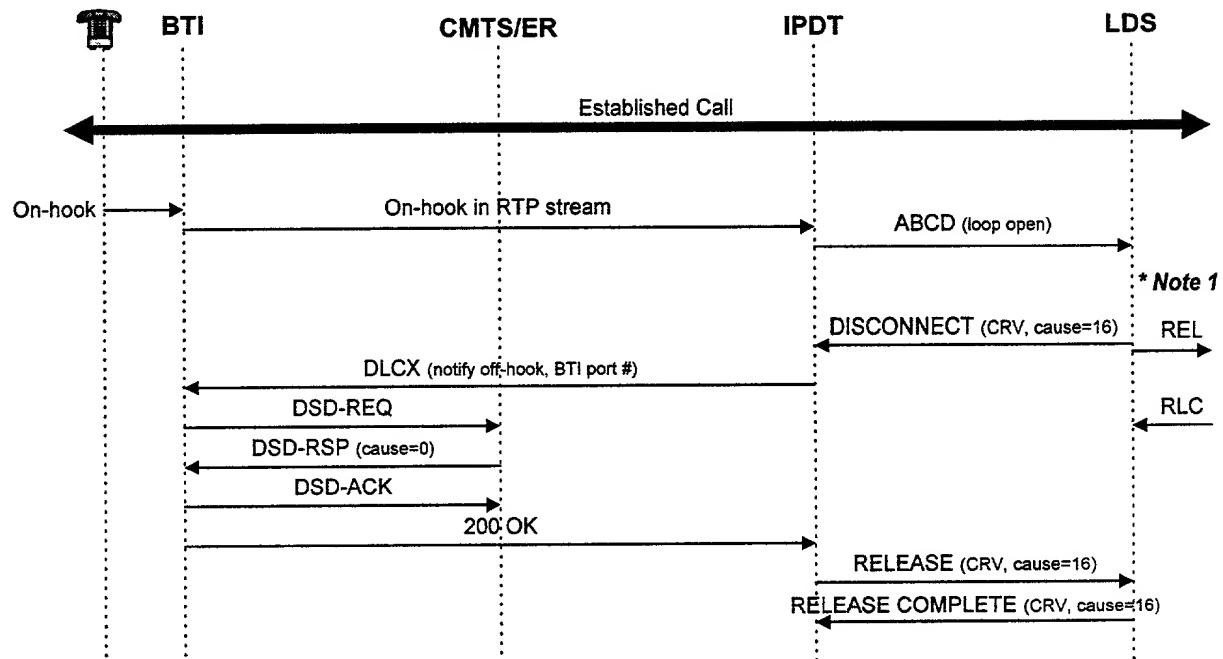


Figure 2: Incoming (PSTN-Originated) Call Setup

Fig. 4

2.3 BTI-INITIATED CALL TERMINATION

The signaling flow for the termination of a call by the BTI is shown in Figure 3. Note that this flow applies to all calls *except* 911-calls.¹³



Note 1: LDS withholds DISCONNECT if call is a 911 call
(see E-911 signaling flow for details)

Figure 3: BTI-Initiated Call Termination

Note that a cause code of "16" in a GR-303 message is an indication of normal clearing, such as when either the calling or called party hangs up.

Fig. 5

¹³ The call flow for termination of a 911 call is provided in Section 2.7

2.4 PSTN-INITIATED CALL TERMINATION

The signaling flow for the termination of a call by the PSTN is shown in Figure 4.

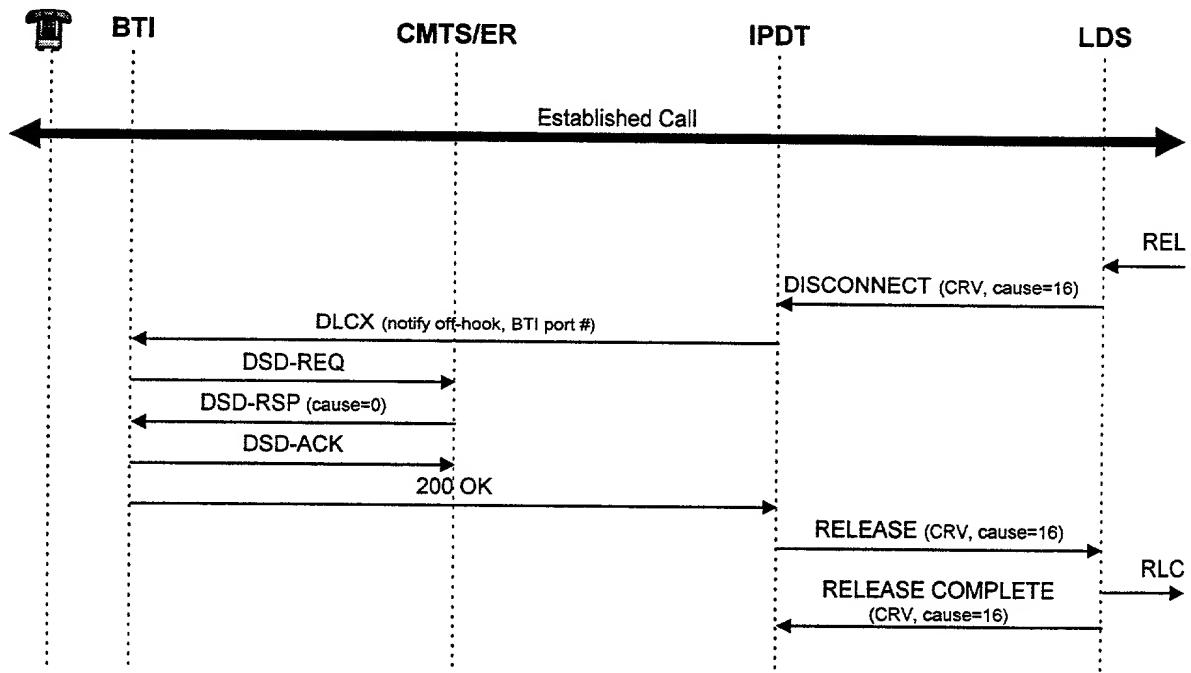


Figure 4: PSTN-Initiated Call Termination

Fig. 6

2.5 CALLER ID WITH CALL WAITING

The signaling flow for the Caller ID with Call Waiting feature is shown in Figure 5.

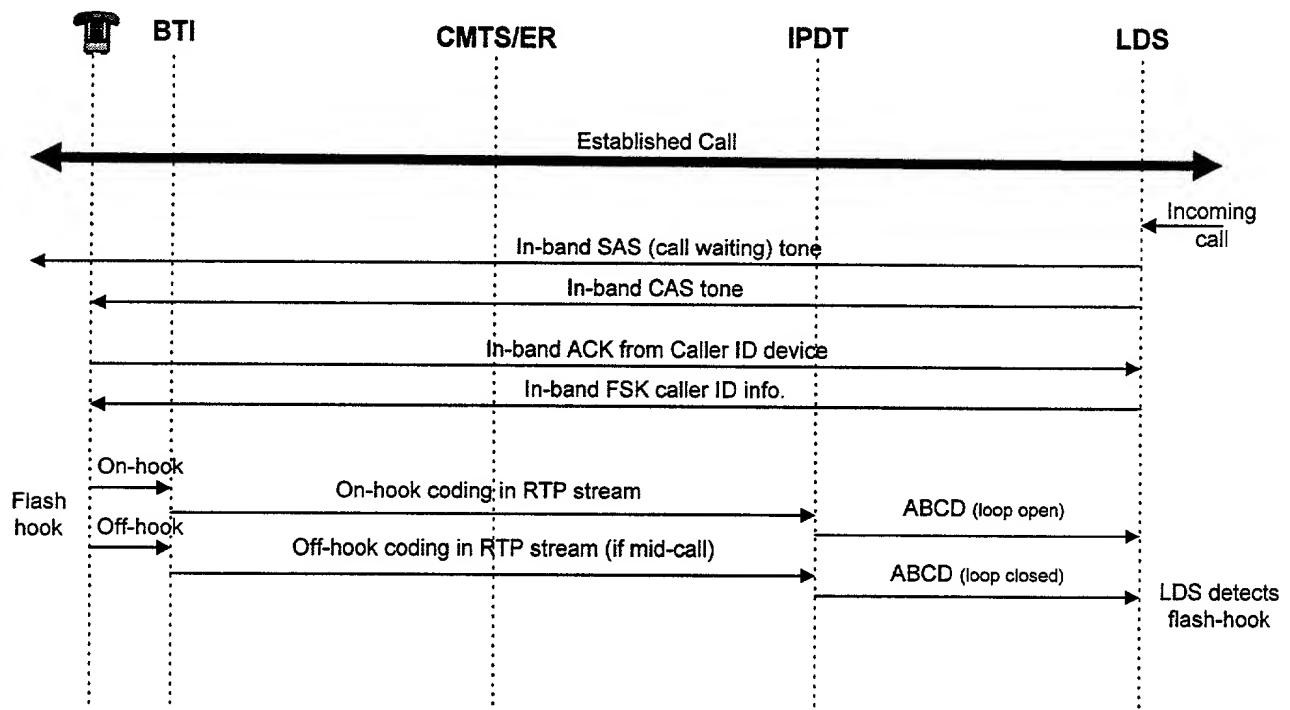


Figure 5: Caller ID with Call Waiting

Fig. 7

2.6 MESSAGE WAITING INDICATION (ON-HOOK)

The signaling flow for the on-hook indication of a waiting message (for the Message Waiting feature) is shown in Figure 6.

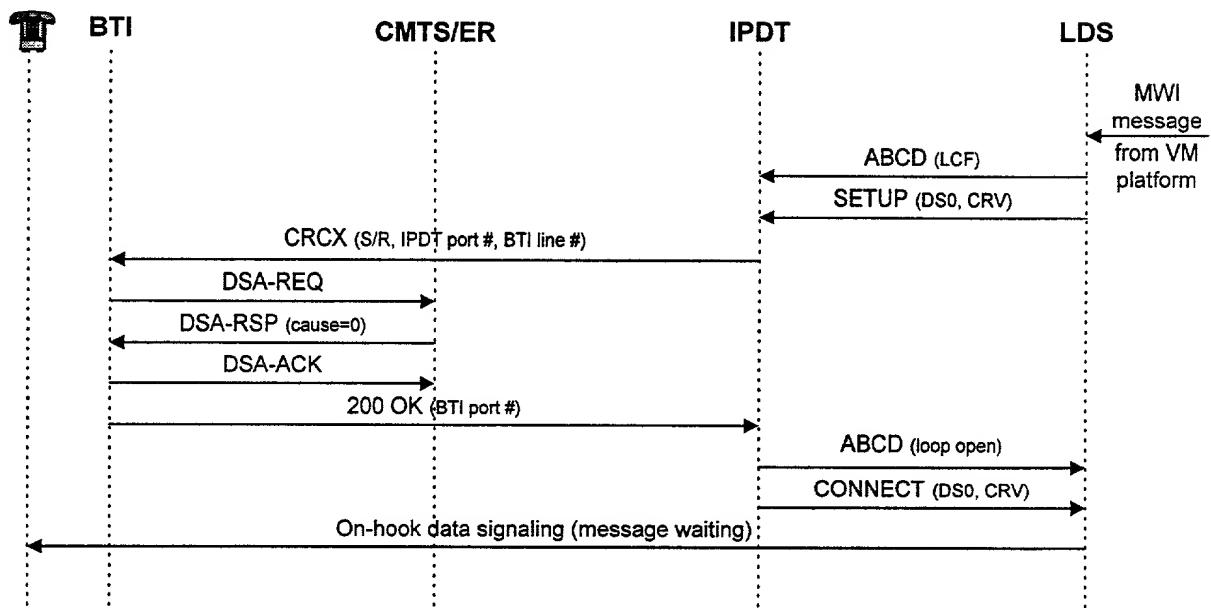


Figure 6: Message Waiting Indication (On-hook)

Fig. 8

2.7 EMERGENCY (E-911) CALL

The signaling flow for the delayed termination of an Emergency (E-911) call is shown in Figure 7.

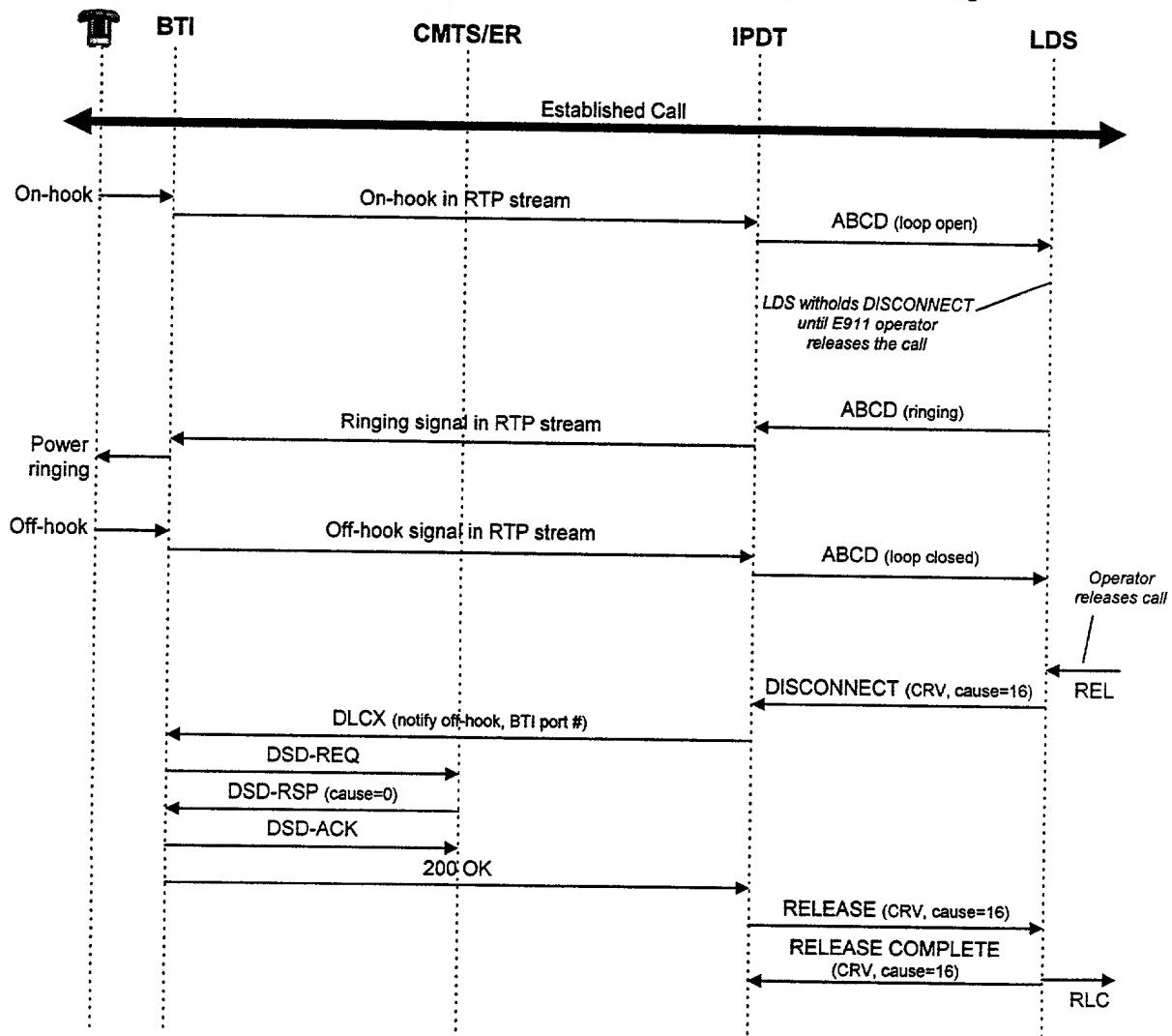


Figure 7: Emergency (E-911) Call Delayed Termination

Fig. 9

2.8 BANDWIDTH UNAVAILABLE (OUTGOING CALL ATTEMPT)

The signaling flow for an outgoing (BTI-originated) call attempt for which bandwidth is unavailable is shown in Figure 8.

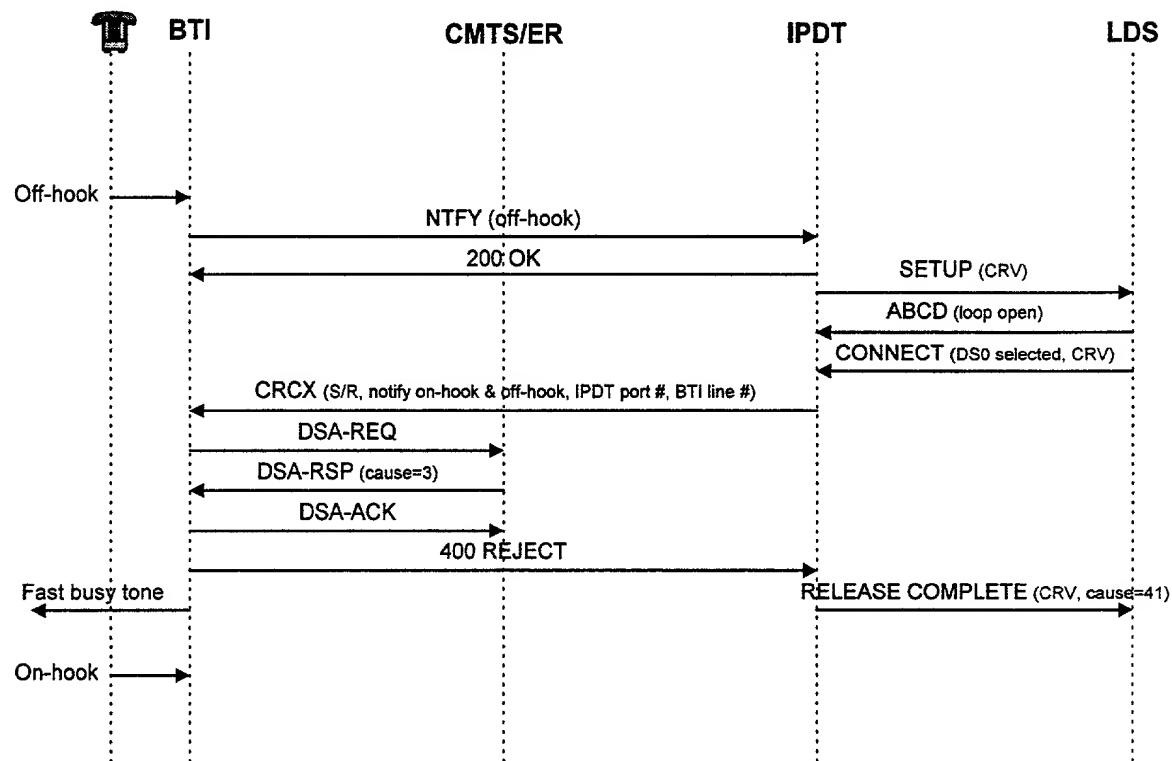


Figure 8: Bandwidth Unavailable (Outgoing Call Attempt)

Note that a cause code of '3' in a DOCSIS response (DSA-RSP) message indicates that a resource is temporarily unavailable.

Fig. 10

2.9 RESOURCE UNAVAILABLE (OUTGOING CALL ATTEMPT)

The signaling flow for an outgoing (BTI-originated) call attempt for which a resource (other than HFC bandwidth) is unavailable is shown in Figure 9.

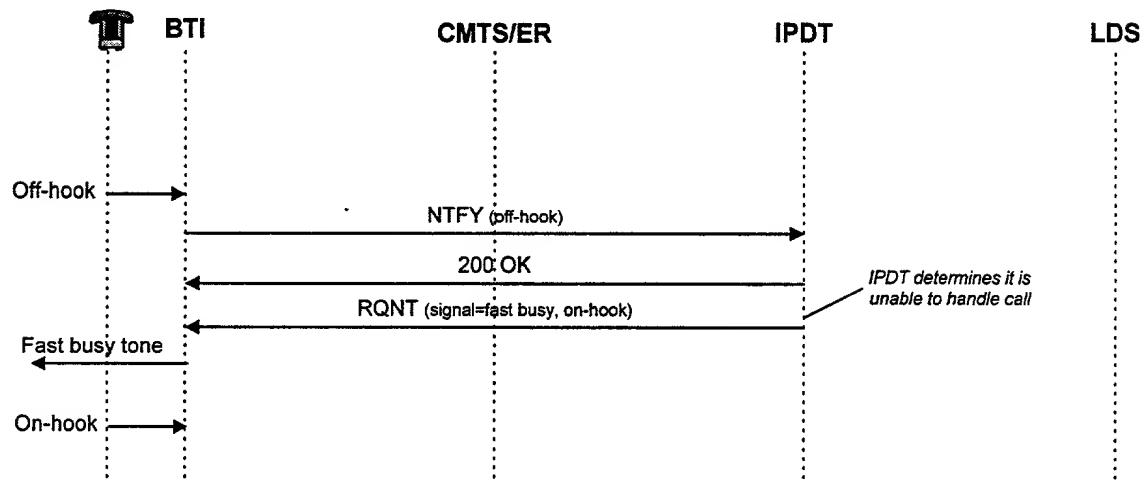


Figure 9: Resource Unavailable (Outgoing Call Attempt)

Note that the IPDT may determine that it is unable to handle the call either internally, or by sending a SETUP message to the LDS and receiving a RELEASE COMPLETE message back (with cause code 34 or 44, indicating a resource such as a DS0 is unavailable).

Fj. 11

2.10 BANDWIDTH UNAVAILABLE (INCOMING CALL ATTEMPT)

The signaling flow for an incoming (PSTN-originated) call attempt for which bandwidth is unavailable is shown in Figure 10.

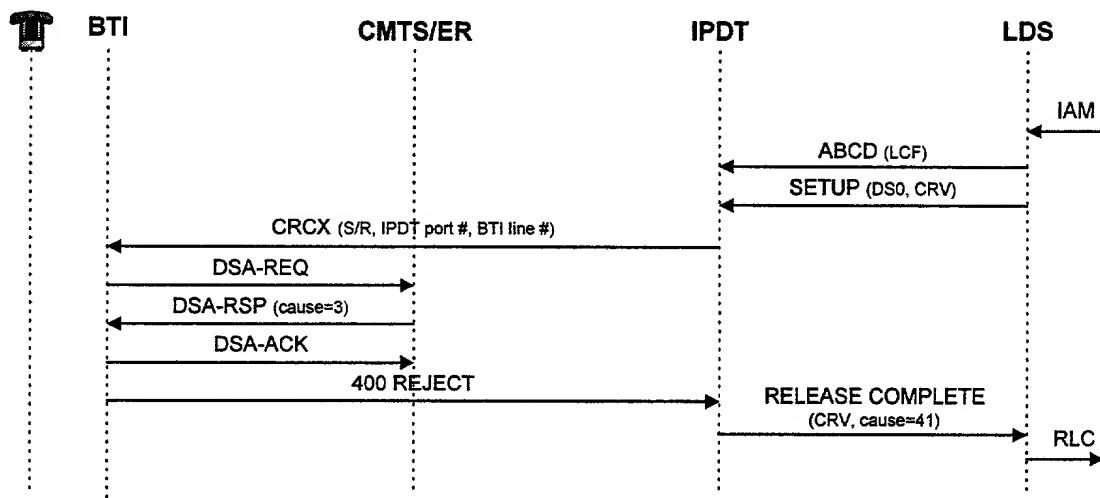


Figure 10: Bandwidth Unavailable (Incoming Call Attempt)

Fig. 12

2.11 PERMANENT SIGNAL CONDITION (POST-CALL)

The signaling flow for handling a permanent signal condition caused by the customer not hanging up in a timely manner after the other party on the call has disconnected is shown in Figure 11.

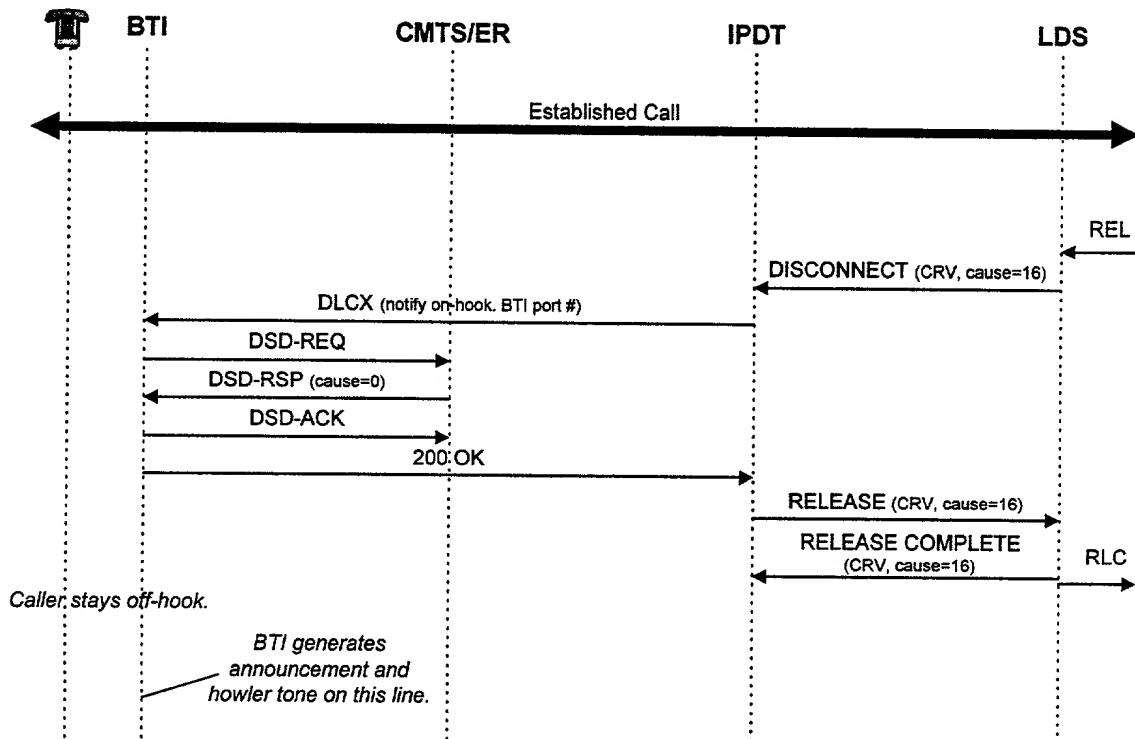


Figure 11: Permanent Signal Condition Treatment (post call)

Fig. 13

2.12 PERMANENT SIGNAL CONDITION (NO DIGITS DIALED)

The signaling flow for handling a permanent signal condition caused by a customer going off-hook and not entering any digits, is shown in Figure 12.

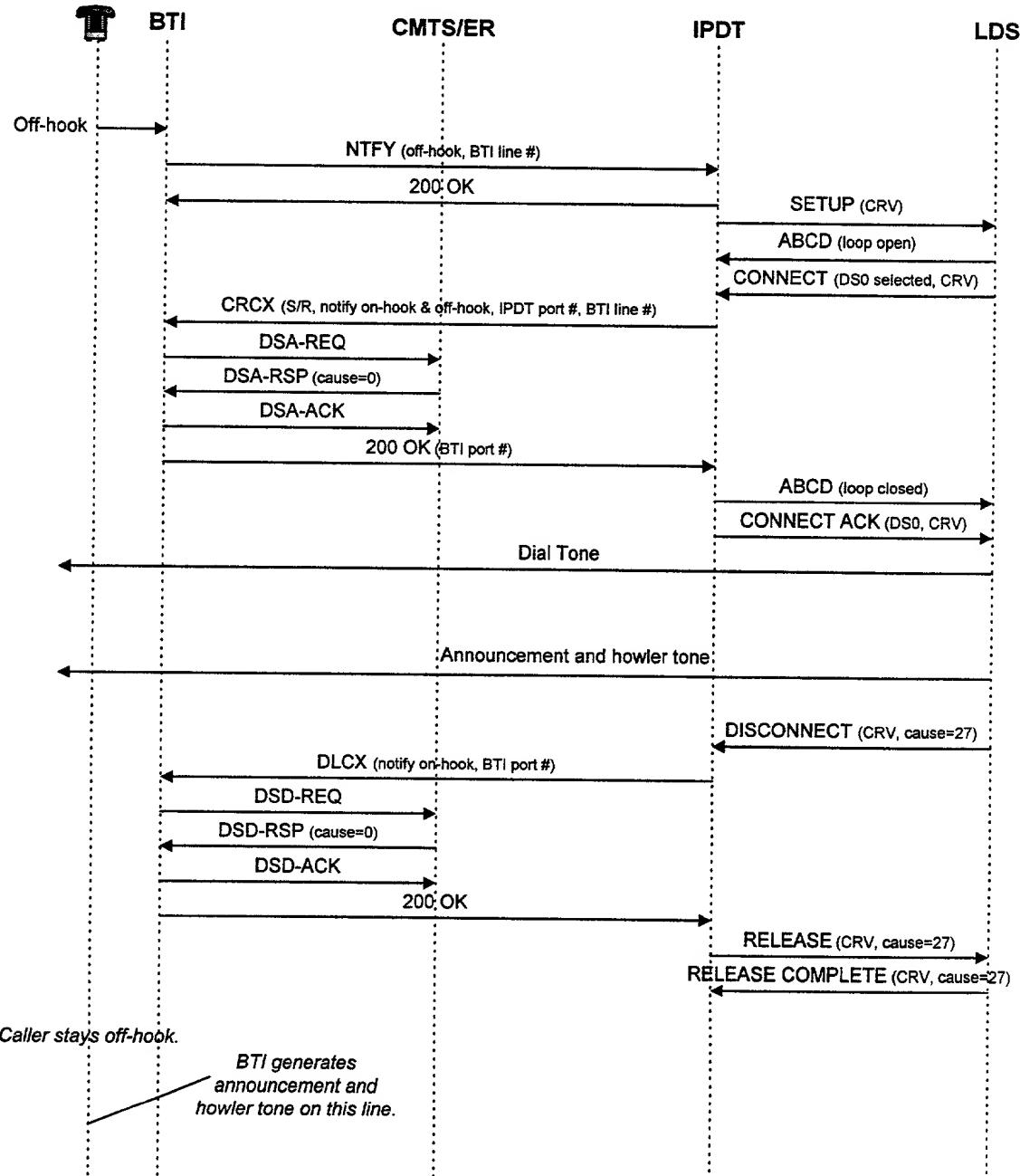


Figure 12: Permanent Signal Condition Treatment (No digits dialed)

Fig. 14